

**Case 3476**

***Dialictus* Robertson, 1902 and *Evyllaesus* Robertson, 1902 (Insecta, Hymenoptera): proposed precedence over *Hemihalictus* Cockerell, 1897, *Sudila* Cameron, 1898 and *Sphecodogastra* Ashmead, 1899**

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**Abstract.** The purpose of this petition, under Articles 23.9.3 and 81.2.3 of the Code, is to give the widely used halictine bee generic names *Dialictus* and *Evyllaesus*, both proposed by Robertson in 1902, precedence over the rarely used but older names *Hemihalictus* Cockerell, 1897, *Sudila* Cameron, 1898 and *Sphecodogastra* Ashmead, 1899 whenever these names are considered to be synonyms. This proposal is intended to best conserve the standard usage of these names.

**Keywords.** Nomenclature; taxonomy; Hymenoptera; HALICTIDAE; *Dialictus*; *Evyllaesus*; *Paralictus*; *Hemihalictus*; *Sudila*; *Sphecodogastra*; *Lasioglossum*; *Lasioglossum* (*Dialictus*) *anomalum*; *Lasioglossum* (*Evyllaesus*) *cinctipes*; *Lasioglossum* (*Paralictus*) *cephalotes*; *Lasioglossum* (*Hemihalictus*) *lustrans*; *Lasioglossum* (*Sudila*) *bidentatum*; *Lasioglossum* (*Sphecodogastra*) *texanum*; halictine bees; sweat bees; cosmopolitan.

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1. Cockerell (1897a, p. 288) described the genus *Hemihalictus* for a single North American species possessing two submarginal cells and now classified as a halictine. *Panurgus lustrans* Cockerell, 1897b (p. 147) is the type species by original designation (and monotypy). *Hemihalictus* has been in general and continuous use, recently as a subgenus of *Lasioglossum* Curtis, 1833, for the single recognised species, a solitary (Daly, 1961) oligolege on plants of the genus *Pyrrhopappus* DC (Michener, 1947) and related ASTERACEAE in the tribe CICHORIEAE (Arduser, in litt.). Outside of general taxonomic works (e.g. catalogues, keys) *Hemihalictus* has been uncommonly used, typically only in reference to its floral specialisation. Searches for *Hemihalictus* using ISI Web of Knowledge (including Zoological Record) and Google Scholar found 10 and 41 records, respectively.

2. Cameron (1898, p. 52) established the genus *Sudila* to include three Asian halictine species. Sandhouse (1943, p. 602) designated *Sudila bidentata* Cameron (1898, p. 54) as the type species. *Ceylonicola* Friese (1918, p. 501) is a junior subjective synonym of *Sudila*, and the type species *Ceylonicola atra* Friese (1918, p. 502) is a junior subjective synonym of *Sudila bidentata*. The six currently recognised species of *Sudila* were revised as a subgenus of *Lasioglossum* by Sakagami et al. (1996). The name *Sudila* has only been used for a few species with a limited geographic range and only rarely appears in scientific literature. Searches for *Sudila* using ISI Web of Knowledge (including Zoological Record) and Google Scholar found 6 and 9 records, respectively.

3. Ashmead (1899, p. 92) proposed the genus *Sphecodogastra* for a single species of halictine with enlarged ocelli and reduced scopa that specialises on plants of the genus *Oenothera* L. (ONAGRACEAE). *Sphecodes texana* Cresson, 1872 (p. 249) is the type species by original designation (and monotypy). Eight species, all specialists on *Oenothera* and related genera and all matinal, crepuscular or nocturnal, were recognised by McGinley (2003) in his revision of the genus. Most current authors treat *Sphecodogastra* as a subgenus of *Lasioglossum* (e.g. Michener, 2000, 2007). Ebmer (2008) questioned the validity of the taxonomic characters that unite these eight species into a subgenus distinct from *Evyllaes*. Outside of general taxonomic works (e.g. catalogues, keys) *Sphecodogastra* is not commonly used, except in reference to its crepuscular habits and floral specialisation. Searches for *Sphecodogastra* using ISI Web of Knowledge (including Zoological Record) and Google Scholar found 11 and 69 records, respectively.

4. Robertson (1901, p. 299) erected the genus *Paralictus* for three metallic halictine species lacking scopae. The type species was designated as *Halictus cephalicus* Robertson, 1892 (p. 270) but, due to primary homonymy with *H. cephalicus* Morawitz, 1873 (p. 173), the replacement name *Halictus cephalotes* Dalla Torre, 1896 (p. 57) is now used. The group was last revised by Mitchell (1960) who recognised five species. The names *Dialictus* Robertson, 1902 and *Chloralictus* Robertson, 1902 (see below) were given precedence over *Paralictus* in Opinion 1882 (BZN 54: 201–202, September 1997; see also Michener, 1995). *Paralictus* is now most commonly treated as a junior synonym of *Dialictus* (Danforth, 1999; Danforth et al., 2003; Michener, 1995, 2000, 2007) and rarely as a subgenus of *Lasioglossum* (Ebmer, 2002). Outside of general taxonomic works (e.g. catalogues, keys) the name is not commonly used, except in reference to the socially parasitic behaviour of its constituent species. Searches for *Paralictus* using ISI Web of Knowledge (including Zoological Record) and Google Scholar found 8 and 52 records, respectively.

5. Robertson (1902a, Feb. 1, p. 48) established the genus *Dialictus* for a single halictine species with dull metallic integument and two submarginal cells. *Halictus anomalus* Robertson (1892, p. 272) is the type species by original designation (and monotypy). Eight species were recognised by Sandhouse (1923). *Dialictus* is now almost always used to include *Chloralictus* (Mitchell, 1960; Hurd, 1979; Moure & Hurd, 1987; Michener, 2000, 2007; Moure et al., 2007) and in the broadest sense accommodates several hundred species (Michener, 2007) with two, three or variably two or three submarginal cells including non-metallic, ‘acarinat *Evyllaes*’ in addition to metallic species (Michener, 2000; 2007). Ebmer (1987, 2002) has maintained that *Dialictus* should be limited to the type species, with the remaining *Dialictus* sensu Michener (2007) in an inclusive *Evyllaes*, a view not shared by any

North American specialist. The name *Dialictus* has been used in hundreds of studies of taxonomy, behaviour, ecology, physiology and biodiversity surveys. Searches for *Dialictus* using ISI Web of Knowledge (including Zoological Record) and Google Scholar found 122 and 946 records, respectively.

6. Robertson (1902b, Sept. 10, p. 247) established the genus *Evyllaesus* for halictine bees related to *Hemihalictus* Cockerell, 1897 with three submarginal cells. The type species is *Halictus arcuatus* Robertson, 1893 (p. 145) by original designation. *Halictus cinctipes* Provancher (1888, p. 316) is a subjective senior synonym of *H. arcuatum*. *Evyllaesus*, as traditionally defined, may be roughly grouped into carinate and acarinate (alternatively referred to as noncarinate or carinaless) forms (Michener, 1990; Packer, 1991). The carinate group includes the type species. Most of the acarinate species have been transferred to *Dialictus* (Michener, 2000; 2007; see also Michener, 1990; 1993; Packer, 1991). This classification is not in use by Old World halictid specialists (Ebmer, 2002; Pesenko, 2007; Murao & Tadauchi, 2007; Pauly et al., 2008). Pesenko (2007) provided a classification of the Palaearctic species of the genus *Evyllaesus* subdivided into 29 subgenera. Pauly et al. (2008) also treated *Evyllaesus* as a genus including three African subgenera all considered synonyms of *Dialictus* by Michener (2007). The name *Evyllaesus* has been used in hundreds of studies of taxonomy, behaviour, ecology and in biodiversity surveys. Searches for *Evyllaesus* using ISI Web of Knowledge (including Zoological Record) and Google Scholar found 154 and 621 records, respectively.

7. Robertson (1902b, Sept. 10, p. 248) erected the genus *Chloralictus* for numerous species related to *Dialictus* with three submarginal cells. *Halictus cressonii* Robertson (1890, p. 317) is the type species by original designation. *Chloralictus* was commonly used (Sandhouse, 1924; Michener, 1944; 1951) until it was synonymised with *Dialictus* by Mitchell (1960). *Chloralictus* is no longer in use, and is treated as a junior synonym of *Dialictus* (Mitchell, 1960; Hurd, 1979; Moure & Hurd, 1987; Michener, 2000, 2007; Moure et al., 2007) or *Evyllaesus* (Ebmer, 1987, 2002; Murao & Tadauchi, 2007). *Chloralictus* has been used infrequently in the last 50 years except when in reference to its relationship to and synonymy with *Dialictus*. Searches for *Chloralictus* using ISI Web of Knowledge (including Zoological Record) and Google Scholar found 23 and 149 records, respectively.

8. Each of the genus-group names mentioned above has been accepted either at the generic rank (Mitchell, 1960; Knerer & Atwood, 1962; Hurd, 1979; Moure & Hurd, 1987; Pauly, 1999; McGinley, 2003; Pesenko, 2007; Moure et al., 2007) or as a subgenus of *Lasioglossum* (Michener, 1944; 1951; 2000; 2007; Ebmer, 2002; Murao & Tadauchi, 2007). Historically, species within *Lasioglossum* sensu lato have been included within *Halictus* Latreille, 1804 but this classification has not been used recently except by Warncke (1975; 1981). The genus-group names of concern here all belong to an informal group called the weak-veined *Lasioglossum* or *Hemihalictus* series as opposed to the strong-veined *Lasioglossum* or *Lasioglossum* series (Danforth, 1999; Michener, 2000, 2007). All available genus-group names within *Lasioglossum* in the broadest possible sense, i.e. all halictine taxa with at least one weakened distal vein of the forewing, are summarised in Table 1.

9. As justified below, the commonly used genus-group names *Dialictus* Robertson, 1902 and *Evyllaesus* Robertson, 1902 should be given precedence over the older names *Hemihalictus* Cockerell, 1897, *Sudila* Cameron, 1898 and *Sphecodogastra* Ashmead,

**Table 1.** List of genus-group names in order of publication for the *Lasioglossum* group in its broadest sense. The subgeneric names of *Lasioglossum* currently recognised by Michener (2007) are given (except those by Pesenko (2006, 2007) which are inferred based on Pesenko's categories of carinate (treated as *Evyllaesus*) and carinaless or green *Evyllaesus* (treated as *Dialictus*); *Warnckenia* is not discussed by Michener (2007) but includes species which have been previously placed in *Lasioglossum* s. str.). *Homalictus* (divided into three subgenera, *Homalictus* s. str., *Papualictus*, *Quasihalictus*), *Echthralictus* (likely a parasitic derivative of *Homalictus*) and *Urohalictus* are treated as genera by Michener (2007) but are herein treated as *Lasioglossum* following Danforth Ji (2001).

Name	Author	Year, page	Vein 1rs-m	Subgenus used by Michener 2007	Type Species	Author	Year	Designation
<i>Lasioglossum</i>	Curtis	1833, pl. 488	strong	<i>Lasioglossum</i>	<i>Lasioglossum tricingulum</i>	Curtis	1833	original
<i>Parasphecodes</i>	Smith	1853, p. 39	strong	<i>Parasphecodes</i>	<i>Parasphecodes hilactus</i>	Smith	1853	Sandhouse, 1943, p. 585
<i>Lucasius</i> <sup>1</sup>	Dours	1872, p. 350	strong	<i>Lasioglossum</i>	<i>Halictus clavipes</i>	Dours	1872	Sandhouse, 1943, p. 566
<i>Hemihalictus</i>	Cockerell	1897, p. 288	absent	<i>Hemihalictus</i>	<i>Panurgus lustrans</i>	Cockerell	1897	original/monotypy
<i>Sudila</i>	Cameron	1898, p. 52	weak	<i>Sudila</i>	<i>Sudila bidentata</i>	Cameron	1898	Sandhouse, 1943, p. 602
<i>Sphecodogastra</i>	Ashmead	1899, p. 92	weak	<i>Sphecodogastra</i>	<i>Sphecodes texana</i>	Cresson	1872	original
<i>Paralictus</i> <sup>2</sup>	Robertson	1901, p. 229	weak/ absent	<i>Dialictus</i>	<i>Halictus cephalicus</i> <sup>3</sup> = <i>Halictus cephalotes</i> <sup>4</sup>	Robertson Dalla Torre	1892 1896	original
<i>Dialictus</i>	Robertson	1902, p. 48	absent	<i>Dialictus</i>	<i>Halictus anomalus</i>	Robertson	1902	original/monotypy
<i>Evyllaesus</i>	Robertson	1902, p. 247	weak	<i>Evyllaesus</i>	<i>Halictus arcuatus</i>	Robertson	1893	original
<i>Chloralictus</i>	Robertson	1902, p. 248	weak	<i>Dialictus</i>	<i>Halictus cressonii</i>	Robertson	1890	original
<i>Gastrohalictus</i> <sup>1</sup>	Ducke	1902, p. 102	weak	<i>Dialictus</i>	<i>Halictus osmioides</i>	Ducke	1902	monotypy
<i>Ctenonomia</i>	Cameron	1903, p. 178	strong	<i>Ctenonomia</i>	<i>Ctenonomia carinata</i>	Cameron	1903	monotypy
<i>Lucasiellus</i> <sup>1, 5</sup>	Cockerell	1905, p. 272	strong	<i>Lasioglossum</i>	<i>Halictus clavipes</i>	Dours	1872	Article 72.2
<i>Nesohalictus</i> <sup>1</sup>	Crawford	1910, p. 120	strong	<i>Ctenonomia</i>	<i>Halictus robbii</i>	Crawford	1910	original
<i>Halictomorpha</i>	Schrottky	1911, p. 81	weak	<i>Dialictus</i>	<i>Halictomorpha phaedra</i>	Schrottky	1911	original
<i>Lucasellus</i> <sup>1, 5</sup>	Schulz	1911, p. 202	strong	<i>Lasioglossum</i>	<i>Halictus clavipes</i>	Dours	1872	Article 72.2
<i>Prosopalictus</i>	Strand	1913, p. 26	absent	<i>Dialictus</i>	<i>Prosopalictus micans</i> <sup>6</sup> = <i>Lasioglossum micante</i> <sup>7</sup>	Strand Michener	1913 1993	original
<i>Ceylonicola</i> <sup>8</sup>	Friese	1918, p. 501	weak	<i>Sudila</i>	<i>Ceylonicola atra</i>	Friese	1918	Sandhouse, 1943, p. 536
<i>Curtisapis</i>	Robertson	1918, p. 91	strong	<i>Lasioglossum</i>	<i>Halictus coriaceus</i>	Smith	1853	original
<i>Homalictus</i> <sup>1</sup>	Cockerell	1919, p. 13	strong	<i>Homalictus</i>	<i>Halictus taclobanensis</i>	Cockerell	1915	original
<i>Acanthalictus</i>	Cockerell	1924, p. 184	weak	<i>Acanthalictus</i>	<i>Halictus dybowskii</i>	Radoszkowski	1877	original
<i>Echthralictus</i>	Perkins & Cheesman	1928, p. 14	strong	<i>Echthralictus</i>	<i>Halictus extraordinarius</i>	Kohl	1908	original
<i>Aphalictus</i> <sup>9</sup>	Cockerell	1930, p. 40	strong	<i>Parasphecodes</i>	<i>Parasphecodes bribiensis</i>	Cockerell	1916	original
<i>Indohalictus</i> <sup>1</sup>	Blüthgen	1931, p. 291	strong	<i>Homalictus</i>	<i>Halictus buccinus</i>	Vachal	1894	original
<i>Oxyhalictus</i> <sup>1</sup>	Cockerell & Ireland	1935, p. 91	strong	<i>Ctenonomia</i>	<i>Halictus acuíferus</i>	Cockerell & Ireland	1935	monotypy

Table 1. Continued.

Name	Author	Year, page	Vein 1rs-m	Subgenus used by Michener 2007	Type Species	Author	Year	Designation
<i>Rhynchalictus</i>	Moure	1947, p. 5	weak	<i>Dialictus</i>	<i>Rhynchalictus rostratus</i>	Moure	1947	original
<i>Australictus</i> <sup>10</sup>	Michener	1965, p. 165	strong	<i>Australictus</i>	<i>Halictus peraustralis</i>	Cockerell	1904	original
<i>Pseudochilalictus</i> <sup>10</sup>	Michener	1965, p. 170	strong	<i>Pseudochilalictus</i>	<i>Lasioglossum imitator</i>	Michener	1965	original
<i>Callalictus</i> <sup>10</sup>	Michener	1965, p. 170	strong	<i>Callalictus</i>	<i>Parasphecodes toloomensis</i>	Cockerell	1929	original
<i>Austrevylaeus</i> <sup>10</sup>	Michener	1965, p. 170	weak	<i>Austrevylaeus</i>	<i>Halictus sordidus</i>	Smith	1853	original
<i>Glossalictus</i> <sup>10</sup>	Michener	1965, p. 173	strong	<i>Glossalictus</i>	<i>Halictus etheridgei</i>	Cockerell	1916	original
<i>Chilalictus</i> <sup>10</sup>	Michener	1965, p. 174	strong	<i>Chilalictus</i>	<i>Halictus subinclinans</i>	Cockerell	1915	original
<i>Microhalictus</i> <sup>1</sup>	Warncke	1975, p. 85	weak	<i>Dialictus</i>	<i>Melitta minutissima</i>	Kirby	1802	original
<i>Puncthalictus</i> <sup>1</sup>	Warncke	1975, p. 87	weak	<i>Dialictus</i>	<i>Hylaeus punctatissimus</i>	Schenck	1853	original
<i>Rostrohalictus</i> <sup>1</sup>	Warncke	1975, p. 88	weak	<i>Dialictus</i>	<i>Halictus longirostris</i>	Morawitz	1876	original
<i>Smeathhalictus</i> <sup>1</sup>	Warncke	1975, p. 88	weak	<i>Dialictus</i>	<i>Melitta smeathmanella</i>	Kirby	1802	original
<i>Pallhalictus</i> <sup>1</sup>	Warncke	1975, p. 92	strong	<i>Lasioglossum</i>	<i>Halictus pallens</i>	Brullé	1832	original
<i>Fahrhalictus</i> <sup>1</sup>	Warncke	1975, p. 95	strong	<i>Lasioglossum</i>	<i>Halictus fahringeri</i>	Friese	1921	original
<i>Marghalictus</i> <sup>1</sup>	Warncke	1975, p. 95	weak	<i>Dialictus</i>	<i>Hylaeus marginellus</i>	Schenck	1853	original
<i>Inhalictus</i> <sup>1</sup>	Warncke	1975, p. 96	weak	<i>Evylaeus</i>	<i>Hylaeus interruptus</i>	Panzer	1798	original
<i>Leuchalictus</i> <sup>1</sup>	Warncke	1975, p. 98	strong	<i>Lasioglossum</i>	<i>Apis leucozonias</i>	Schrank	1781	original
<i>Calchalictus</i> <sup>1</sup>	Warncke	1975, p. 99	weak	<i>Evylaeus</i>	<i>Apis calceata</i>	Scopoli	1763	original
<i>Pyghalictus</i> <sup>1</sup>	Warncke	1975, p. 102	weak	<i>Dialictus</i>	<i>Andrena pygmaea</i> <sup>11</sup>	Fabricius	1804	original
<i>Papualictus</i> <sup>12</sup>	Michener	1980, p. 8	strong	<i>Papualictus</i>	<i>Homalictus megalochilus</i>	Michener	1980	original
<i>Urohalictus</i>	Michener	1980, p. 16	strong	<i>Urohalictus</i>	<i>Urohalictus lieftincki</i>	Michener	1980	original
<i>Sellalictus</i> <sup>9</sup>	Pauly	1980, p. 120	weak	<i>Sellalictus</i>	<i>Halictus latesellatus</i>	Cockerell	1937	original
<i>Pauphalictus</i> <sup>1</sup>	Warncke	1981, p. 87	weak	<i>Dialictus</i>	<i>Halictus pauperatus</i>	Brullé	1832	original
<i>Labrohalictus</i> <sup>10</sup>	Pauly	1981, p. 719	strong	<i>Ctenonomia</i>	<i>Lasioglossum saegeri</i>	Pauly	1981	monotypy
<i>Habralictellus</i>	Moure & Hurd	1982, p. 46	weak/ absent	<i>Dialictus</i>	<i>Halictus auratus</i>	Ashmead	1900	original
<i>Afrodialictus</i> <sup>10</sup>	Pauly	1984, p. 142	weak	<i>Dialictus</i>	<i>Halictus bellulus</i>	Vachal	1909	original
<i>Mediocralictus</i> <sup>10</sup>	Pauly	1984, p. 143	weak	<i>Dialictus</i>	<i>Halictus mediocris</i>	Benoist	1962	original
<i>Paradialictus</i>	Pauly	1984, p. 691	weak	<i>Paradialictus</i>	<i>Paradialictus synavei</i>	Pauly	1984	original
<i>Lophalictus</i> <sup>10</sup>	Pesenko	1986, p. 125	strong	<i>Lasioglossum</i>	<i>Lasioglossum acuticrista</i>	Pesenko	1986	original
<i>Bluethgenia</i> <sup>10</sup>	Pesenko	1986, p. 136	strong	<i>Lasioglossum</i>	<i>Halictus dynastes</i>	Bingham	1898	original
<i>Ebmeria</i> <sup>10</sup>	Pesenko	1986, p. 136	strong	<i>Lasioglossum</i>	<i>Halictus costulatus</i>	Kriechbaumer	1873	original
<i>Sericohalictus</i> <sup>10</sup>	Pesenko	1986, p. 137	strong	<i>Lasioglossum</i>	<i>Halictus subopacus</i>	Smith	1853	original

Table 1. Continued.

Name	Author	Year, page	Vein	Subgenus used by Michener 2007	Type Species	Author	Year	Designation
<i>Quasilictus</i> <sup>12</sup>	Walker	1986, p. 166	strong	<i>Quasilictus</i>	<i>Homalictus brevicornutus</i>	Walker	1986	original
<i>Rubrihalictus</i> <sup>10</sup>	Pauly	1999, p. 158	strong	<i>Ctenonomia</i>	<i>Halictus rubricaudis</i>	Cameron	1905	original
<i>Ipomalictus</i> <sup>10</sup>	Pauly	1999, p. 158	strong	<i>Ctenonomia</i>	<i>Halictus nudatus</i>	Benoist	1962	original
<i>Eickwortia</i>	McGinley	1999, p. 112	weak	<i>Eickwortia</i>	<i>Halictus nycteris</i>	Vachal	1904	original
<i>Gnathalictus</i>	Moure	2001, p. 493	weak	<i>Dialictus</i>	<i>Gnathalictus capitatus</i>	Moure	2001	original
<i>Warnckenia</i>	Pesenko	2006, p. 136	strong	<i>Lastioglossum</i>	<i>Melitta quadrinotata</i>	Kirby	1802	original
<i>Mimutulaeus</i> <sup>13</sup>	Pesenko	2007, p. 11	weak	<i>Evyllaenus</i>	<i>Hylaenus minutulus</i>	Schenck	1853	original
<i>Nodicornewyllaenus</i> <sup>13</sup>	Pesenko	2007, p. 11	weak	<i>Evyllaenus</i>	<i>Halictus nodicornis</i>	Morawitz	1889	original
<i>Biennilaenus</i> <sup>13</sup>	Pesenko	2007, p. 13	weak	<i>Evyllaenus</i>	<i>Halictus marginatus</i>	Brullé	1832	original
<i>Monilevyllaenus</i> <sup>13</sup>	Pesenko	2007, p. 13	weak	<i>Evyllaenus</i>	<i>Halictus immunitus</i>	Vachal	1895	original
<i>Tricinctevyllaenus</i> <sup>13</sup>	Pesenko	2007, p. 14	weak	<i>Evyllaenus</i>	<i>Halictus trinctus</i>	Schenck	1874	original
<i>Fratevyllaenus</i> <sup>13</sup>	Pesenko	2007, p. 14	weak	<i>Evyllaenus</i>	<i>Halictus fratellus</i>	Pérez	1903	original
<i>Malachevyllaenus</i> <sup>13</sup>	Pesenko	2007, p. 15	weak	<i>Evyllaenus</i>	<i>Melitta malachura</i>	Kirby	1802	original
<i>Pauxevyllaenus</i> <sup>13</sup>	Pesenko	2007, p. 15	weak	<i>Evyllaenus</i>	<i>Hylaenus pauxillus</i>	Schenck	1853	original
<i>Limbevyllaenus</i> <sup>13</sup>	Pesenko	2007, p. 20	weak	<i>Dialictus</i>	<i>Halictus limbellus</i>	Morawitz	1876	original
<i>Crassevyllaenus</i> <sup>13</sup>	Pesenko	2007, p. 20	weak	<i>Dialictus</i>	<i>Halictus crassepunctatus</i>	Blüthgen	1923	original
<i>Laevinodilaenus</i> <sup>13</sup>	Pesenko	2007, p. 20	weak	<i>Dialictus</i>	<i>Halictus laevinodis</i>	Morawitz	1876	original
<i>Pallidevyllaenus</i> <sup>13</sup>	Pesenko	2007, p. 23	weak	<i>Dialictus</i>	<i>Nomioides pallida</i>	Radoszkowski	1888	original/monotypy
<i>Nitidusculaenus</i> <sup>13</sup>	Pesenko	2007, p. 24	weak	<i>Dialictus</i>	<i>Melitta nitiduscula</i>	Kirby	1802	original
<i>Truncevyllaenus</i> <sup>13</sup>	Pesenko	2007, p. 24	weak	<i>Dialictus</i>	<i>Halictus truncatipennis</i>	Morawitz	1876	original
<i>Viridihalictus</i> <sup>13</sup>	Pesenko	2007, p. 25	weak	<i>Dialictus</i>	<i>Halictus viridis</i>	Brullé	1840	original/monotypy
<i>Glauchalictus</i> <sup>13</sup>	Pesenko	2007, p. 26	weak	<i>Dialictus</i>	<i>Halictus problematicus</i>	Blüthgen	1923	original
<i>Virensalictus</i> <sup>13</sup>	Pesenko	2007, p. 26	weak	<i>Dialictus</i>	<i>Hylaenus virens</i>	Erichson	1835	original
<i>Loethalictus</i> <sup>13</sup>	Pesenko	2007, p. 26	weak	<i>Dialictus</i>	<i>Halictus loetus</i>	Brullé	1840	original/monotypy
<i>Aerathalictus</i> <sup>13</sup>	Pesenko	2007, p. 27	weak	<i>Dialictus</i>	<i>Melitta aerata</i>	Kirby	1802	original

1. Names first proposed for subgenera of *Halictus*. 2. *Dialictus* and *Chloralictus* have priority over *Paralictus* (Opinion 1882, BZN 54: 201–202, September 1997). 3. Not *Halictus cephalotes* Morawitz, 1873. 4. Replacement name *Halictus cephalotes* Dalla Torre, 1896. 5. Replacement name for *Lucasius Dours*, 1872 due to primary homonymy with *Lucasius Kinahan*, 1859. 6. Not *Halictus micans*, Strand, 1909. 7. Replacement name for *Prosopalictus micans* due to primary homonymy with *Halictus micans*, Strand, 1909. 8. Isogenotypic with *Sudila*. 9. Name first described as a subgenus of *Parasphhecodes*. 10. Names first described as subgenera of *Lastioglossum*. 11. Identity in doubt (intended for group containing *L. politum* [Schenck]; see Ebmer, 1988, p. 666). 12. Names first described as subgenera of *Homalictus*. 13. Names first described as subgenera of *Evyllaenus*.

1899. *Dialictus* Robertson, 1902 and *Chloralictus* Robertson, 1902 were given precedence over the older name *Paralictus* Robertson, 1901 because the former two genus-group names were more broadly applied and because these names were widely used in studies of taxonomy, ecology and behaviour, especially the evolution of social behaviour (Michener, 1995). Nomenclatural issues for this group were not fully resolved by this decision (Michener, 2000, 2007) because of the existence of the additional older names discussed here that are used with, at most, similar frequency to *Paralictus*. The names *Dialictus* and *Evyllaesus* have each been used with a frequency more than an order of magnitude greater than the older names. An exhaustive search revealed more records for *Dialictus* in a four year span from 2005 to 2008 than for the combined number of records for *Hemihalictus*, *Sudila*, *Sphecodogastra* and *Paralictus* over more than 100 years. The relatively infrequent use of *Paralictus* was considered suitable justification for giving precedence to *Dialictus* and *Chloralictus* in cases where they are treated as synonymous with the older *Paralictus* (Michener, 1995) but usage of *Paralictus* is greater than that of *Hemihalictus* or *Sudila* and little less than *Sphecodogastra*. Following Michener's (2007) classification, both *Dialictus* and *Evyllaesus* contain hundreds of species and are distributed widely in both the New and Old worlds. As a result they are commonly encountered insects which are frequently referred to in scientific papers. In contrast, *Hemihalictus*, *Sudila* and *Sphecodogastra* have only been used to represent species-poor, geographically-restricted taxa which are globally uncommon. The following examples illustrate the wide use of both *Dialictus* and *Evyllaesus* in catalogues, keys and taxonomic revisions (e.g. Mitchell, 1960; Knerer & Atwood, 1962; Hurd, 1979; Ebmer, 1987, 1995, 2002; Moure & Hurd, 1987; Michener et al., 1994; Michener, 2000, 2007; Pesenko et al., 2000; Moure et al., 2007; Murao & Tadauchi, 2007; Pesenko, 2007), and studies of ecology and biodiversity (e.g. Leuck & Hammons, 1969; Bernhardt, 1976; Motten, 1986; Wilson & Thomson, 1991; Bishop & Armbruster, 1999; Grixti & Packer, 2006; Giles & Ascher, 2006; Tuell et al., 2009), physiology and genetics (e.g. Hefetz et al., 1978; Duffield et al., 1980; Kukuk & May, 1985; Packer & Taylor, 2002), behaviour and the evolution of social behaviour (e.g. Wilson, 1971, 1975; Sakagami & Michener, 1962; Michener, 1974, 1990; Eickwort, 1988; Packer, 1993, 1994, 1997; Packer & Owen, 1994; Yanega, 1997; Danforth, 1999, 2002; Danforth et al., 2003; Brady et al., 2006; Hirata & Higashi, 2008; see bibliographies for additional references). Given the numerous studies involving the names *Dialictus* and *Evyllaesus*, and current application of these names to hundreds of species on all continents where bees occur, stability of nomenclature would be best maintained by setting aside precedence of the less commonly used names *Hemihalictus*, *Sudila* and *Sphecodogastra* under those circumstances when *Hemihalictus*, *Sudila* and *Sphecodogastra* are considered synonymous with *Dialictus* and/or *Evyllaesus*.

10. Current usage of the names *Dialictus* and *Evyllaesus* results in a nomenclatural problem because these names are beginning to be used in a broader sense that includes the older names *Hemihalictus*, *Sudila* and *Sphecodogastra*. For example, Danforth (1999, 2002), Danforth and Ji (2001), Danforth et al. (2003), and Gibbs (2009) refer to the 'acarinata *Evyllaesus*' (species now commonly included in *Dialictus*) which includes both *Sudila* and *Hemihalictus*. However, the taxonomic and nomenclatural implications of this grouping are not discussed. Ebmer (2008) shows that

many of the diagnostic characters of *Sphecodogastra* are evident in species of Palearctic *Evyllaenus*, however, he continues to use the latter name as an inclusive group rather than the former. No formal synonymies of these names have yet been made because the rule of priority would preclude the use of the preferred names, *Dialictus* and *Evyllaenus* (see Michener, 1979, 1993, 2000, 2007). Revisionary and faunal studies of North American *Dialictus* and *Evyllaenus*, which will apply these names in a broad sense to include *Hemihalictus*, *Sphecodogastra* and *Sudila*, are currently in preparation. The revised classification in these studies threatens the long-established application of *Dialictus* and *Evyllaenus*. Application of the rule of priority in these cases will require several hundred species of *Dialictus* and *Evyllaenus* sensu Michener (2007) to be transferred to *Hemihalictus* and *Sphecodogastra*: decisions unlikely to be accepted by the majority of authors. As in the case of *Paralictus*, these nomenclatural problems would not be completely solved if the precedence of only the oldest name, *Hemihalictus*, was set aside in cases where it is treated as synonymous with *Dialictus* and/or *Evyllaenus* because it would then create an identical situation where hundreds of species would be transferred to the infrequently used names *Sudila* or *Sphecodogastra*. Transferring hundreds of species to *Sudila* and *Sphecodogastra*, the next two oldest genus-group names among weak-veined *Lasioglossum*, has the same disadvantages as changing them to *Hemihalictus* or *Paralictus*. For this reason, the precedence of these two names should also be set aside in cases where they are treated as synonymous with *Dialictus* or *Evyllaenus*. Applying the rule of priority in these cases would not be in accordance with stability of nomenclature.

11. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to rule that the names *Dialictus* Robertson, 1902 and *Evyllaenus* Robertson, 1902 be given precedence over *Hemihalictus* Cockerell, 1897, *Sudila* Cameron, 1898 and *Sphecodogastra* Ashmead, 1899 whenever they are considered to be synonyms;
- (2) to emend the entry on the Official List of Generic Names in Zoology for the name *Dialictus* Robertson, 1902 (gender: masculine), type species by original designation and monotypy *Halictus anomalus* Robertson, 1892, with the endorsement that it is to be given precedence over *Hemihalictus* Cockerell, 1897, *Sudila* Cameron, 1898 and *Sphecodogastra* Ashmead, 1899 in addition to *Paralictus* Robertson, 1901 whenever it and any of the other three are considered to be synonyms;
- (3) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Evyllaenus* Robertson, 1902 (gender: masculine), type species by original designation *Halictus arcuatus* Robertson, 1893, with the endorsement that it is to be given precedence over *Hemihalictus* Cockerell, 1897, *Sudila* Cameron, 1898 and *Sphecodogastra* Ashmead, 1899 whenever they are considered to be synonyms;
  - (b) *Hemihalictus* Cockerell, 1897 (gender: masculine), type species by original designation and monotypy *Panurgus lustrans* Cockerell, 1897, with the endorsement that it is not to be given priority over *Dialictus* Robertson, 1902 or *Evyllaenus* Robertson, 1902 when it is considered to be a synonym of either;



- (c) *Sudila* Cameron, 1898 (gender: feminine) type species by designation by Sandhouse (1943) *Sudila bidentata* Cameron, 1898, with the endorsement that it is not to be given priority over *Dialictus* Robertson, 1902 or *Evyllaesus* Robertson, 1902 when it is considered to be a synonym of either;
- (d) *Sphécodogastra* Ashmead, 1899 (gender: feminine), type species by original designation and monotypy *Sphécodes texana* Cresson, 1872, with the endorsement that it is not to be given priority over *Dialictus* Robertson, 1902 or *Evyllaesus* Robertson, 1902 when it is considered to be a synonym of either;
- (4) to place on the Official List of Specific Names in Zoology the following names:
- (a) *cinctipes* Provancher, 1888, as published in the binomen *Halictus cinctipes*, senior subjective synonym of *Halictus arcuatus* Robertson, 1898, the specific name of the type species of *Evyllaesus* Robertson, 1902;
- (b) *lustrans* Cockerell, 1897, as published in the binomen *Panurgus lustrans* (specific name of the type species of *Hemihalictus* Cockerell, 1897);
- (c) *bidentata* Cameron, 1898, as published in the binomen *Sudila bidentata* (specific name of the type species of *Sudila* Cameron, 1898);
- (d) *texana* Cresson, 1872, as published in the binomen *Sphécodes texana* (specific name of the type species of *Sphécodogastra* Ashmead, 1899).

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